90/1-34-09

ORIGINAL (Red)

TSCA Section 6(e) PCB Inspection

Pennsylvania Power and Light Company

Lancaster, Pennsylvania

Date of Inspection: June 10-11, 1987

EPA Representatives:

Gerard R. Donovan, Jr.
Environmental Protection Specialist

George H. Houghton
Environmental Protection Specialist

Facility Representative:

Robert Cook
Supervisory Engineer
Substation

ORIGINAL (Red)

Background

The purpose of this inspection was to document and verify the compliance status of PP&L Company with federal TSCA regulations concerning the handling, storage and disposal of PCB items (PCB Rule 40 CFR, Part 761). The facility was selected for inspection to verify their PCB Spill Cleanup in the South Akron Substation, Akron, PA.

Opening Conference

The EPA representatives met with Mr. Robert Cook at the Lancaster PP&L office on June 11, 1987 at approximately 0800, for the purpose of sampling the South Akron Substation. The EPA representatives had presented their credentials to Mr. Cook, who had signed the TSCA Notice of Inspection and the TSCA Inspection Confidentiality Notice on June 10, 1987. The EPA representatives had also explained the random soil sampling and the hexagonal grid pattern they would use for the purpose of selecting sampling points for the sampling of the spill area, which would take place on June 11, 1987 in the morning.

Description

On January 13, 1984, PP&L reported a large high voltage (200 KVAR) capacitor leak. The capacitor was located in the bank of similar capacitors in the South Akron, limited access substation. Mr. Cook also informed the EPA representatives that two other PCB spills have occurred at the South Akron substation since the spill that was being sampled for today.

The capacitor leak was estimated to be 2.5 gallons of PCB liquid. PP&L used standard clean-up procedures, i.e., removal and disposal of PCB-contaminated material as the situation demanded. Contaminated gravel was removed and the capacitor bank frame was cleaned with trichloroethane.

ORIGINAL (Red)

PP&L standard procedure calls for clean-up to be completed within 24 hours after discovery of the spill, weather permitting. Removed materials are placed in approved drums for disposal. The drums are placed in storage in Lancaster or Hazleton, PA.

Physical Inspection Sampling

In accordance with the guidelines set by Section IV of Verification of PCB Spill Cleanup by Sampling and Analysis, the EPA representatives staked out a 19 point hexagonal sampling grid for the 9.5' x 12.7' clean-up area. This resulted in 19 soil samples. The soil samples were collected below the gravel layer at a depth of about 5" - 6" below the existing ground surface over rougnly 4" square area. Each sample was collected with individual throw away plastic scoops to prevent cross contamination. Inspection documents for Receipt for Samples and documents and declaration of Confidential Business Information were completed and signed at the end of the sampling. All samples were placed in one quart glass mason jars and kept iced until delivery to the Central Regional Laboratory where they were kept refrigerated until the analyses.

A sketch and photographs of the sampling locations are included with this report.

Analysis

According to the PCB sample analysis, there were PCBs noted in all samples collected at the South Akron, PA capacitor banks, but it is not known if it is from the 1984 spill. A copy of the test results is included with this report.

ORIGINAL (Red)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
CENTRAL REGIONAL LABORATORY
839 BESTGATE ROAD
ANNAPOLIS, MARYLAND 21401

301-224-2740
FTS-922-3752

DATE : July 17, 1987

SUBJECT: PCB Analysis of PP&L Samples, TSCA
870612-04-22, (6/16/87-7/9/87)

FROM : Rosemary Kayser
Chemist

TO : Rick Dreisch
Acting Chief, Annapolis Laboratory

THRU : John Austin
Team Leader, Organic Analysis Section

The samples were analyzed for the presence of PCB's.

Sample Description:

Sample No.	Description	Results Aroclor 1016 ppm
870612-04	PP&L, S. Ackron, Pa., A-1	284
-05	PP&L, S. Ackron, Pa., A-2	7166
-06	PP&L, S. Ackron, Pa., A-3	4654
-07	PP&L, S. Ackron, Pa., B-1	256
-08	PP&L, S. Ackron, Pa., B-2	1225
-09	PP&L, S. Ackron, Pa., B-3	150
-10	PP&L, S. Ackron, Pa., B-4	53870
-11	PP&L, S. Ackron, Pa., C-1	198
-12	PP&L, S. Ackron, Pa., C-2	18
-13	PP&L, S. Ackron, Pa., C-3	165
-14	PP&L, S. Ackron, Pa., C-4	354
-15	PP&L, S. Ackron, Pa., C-5	7000
-16	PP&L, S. Ackron, Pa., D-1	10
-17	PP&L, S. Ackron, Pa., D-2	50
-18	PP&L, S. Ackron, Pa., D-3	7800
-19	PP&L, S. Ackron, Pa., D-4	9558
-20	PP&L, S. Ackron, Pa., E-1	4972
-21	PP&L, S. Ackron, Pa., E-2	23324
-22	PP&L, S. Ackron, Pa., E-3	675

Aroclor 1254 Spike 90% Recovery

RK:eeb

cc: Peggy Zawodny
QCO

ORIGINAL (Red)

Pennsylvania Power and Light
Akron, PA

OCT 2 2 1987

Background

EPA inspector conducted inspection at PP+L Akron substation to verify PCB cleanup level achieved from capacitor spill in 1984. Inspector dug 6" underneath crushed stone to take samples. High levels of PCB contamination were found.

EPA sent letter to facility enclosing sample results and PCB Spill Cleanup Policy. Facility contacts EPA to arrange meeting.

Summary of Meeting of October 21, 1987

PP+L representatives claim that PCB contamination at site is actually historic.

They stated that the standard procedure back in the '70's for damaged capacitors that had an internal pressure increase was to puncture the capacitor and allow the PCBs to flow onto the ground, so that the capacitor could be safely transported. Capacitors generally contain less than 10 gallons and are pure PCBs. This practice continued thougnout much of the '70's. They eventually found out that pressurized capacitors could be safely transported as is.)

This particular substation had a higher-than-average failure rate of 8%.

After the PCB Rule became effective in '78, PP+L cleaned each spill as it occurred, by removing roughly 6 inches of crushed stone and replacing it with clean material.

Facility representatives stated that they are fairly certain, even in the absence of definitive testing, that they have at least 40 to 45 sites in PA with PCB contamination similiar to the contamination at Akron.

PP+L is agreeable to clean this site, they wanted us to be aware that it is probably the "tip of the iceberg".

Possible action

Get them to clean up sites as we find out about them.

Send subpoena to PP+L, and other major utilities to find out extent of practice of puncturing equipment, and contaminated sites. (I.e., identify other locations.)

Refer case(s) to Superfund for actions similiar to Texas Eastern response.

Refer to EPA HQ for direction and risk assessment, since this could be national problem.

Do nothing.

ORIGINAL (Red)

PENNSYLVANIA POWER AND LIGHT
SUMMARY OF SUBPOENA QUESTIONS

1. Identify the locations, time period of use, volume, PCB content, etc. for each oil-filled capacitor. Include any relevant analyses.

2. Identify each known occurence that a capacitor was punctured to release pressure, if it was a PCB capacitor, and describe cleanup measures taken.

3. List information relating to any sample taken at any location for PCB analysis and enclose results.